

## CHAPTER 36. ISSUE AN FAA-INDUSTRY TRAINING STANDARDS (FITS) ACCEPTANCE WHEN REQUESTED BY A FLIGHT SCHOOL, TRAINING CENTER, OR OTHER TRAINING PROVIDER

### SECTION 1. BACKGROUND

#### 1. PROGRAM TRACKING AND REPORTING SUBSYSTEM (PTRS) ACTIVITY CODES. 1861

**2. OBJECTIVE.** This chapter provides information on the Federal Aviation Administration (FAA)-Industry Training Standards (FITS) and the procedures for evaluating a training course or instructional materials submitted for FITS acceptance. Completion of this task results in acceptance or denial of a training program under FITS.

#### 3. DEFINITIONS.

*A. Automation Management.* The demonstrated ability to control and navigate an aircraft by means of the automated systems installed in the aircraft.

*B. Automated Navigation Leg.* A flight of 30 minutes or more conducted between two airports in which the aircraft is controlled primarily by the autopilot and the onboard navigation systems.

(1) A visual flight rules (VFR) automated navigation leg is flown on autopilot beginning from 1,000 feet above ground level (AGL) on the departure until the 45-degree entry to the downwind leg in the VFR airport traffic pattern.

(2) An instrument flight rules (IFR) automated navigation leg is flown on autopilot beginning from 500 feet AGL or the lowest altitude permitted by the Aircraft Flight Manual (AFM) or AFM supplement on departure until reaching the decision altitude or missed approach point on the instrument approach. If a missed approach is flown, it will also be flown using the autopilot and onboard navigation systems.

*C. Automation Competence.* The demonstrated ability to understand and operate the automated systems installed in the aircraft.

*D. Automation Surprise.* The ability of an automated system to provide different cues to pilots

when compared to the analog systems they replace, especially in time-critical situations.

*E. Automation Bias.* The relative willingness of the pilot to trust and use automated systems.

*F. Candidate Assessment.* A system of critical thinking and skill evaluations designed to assess a student's readiness to begin training at the appropriate level.

*G. Critical Safety Tasks/Events.* Those mission-related tasks/events that, if not accomplished quickly and accurately, may result in aircraft damage, injury, or loss of life.

*H. Data Link Situational Awareness Systems.* Systems that feed real-time information to the cockpit on weather, traffic, terrain, and flight planning. This information may be displayed on the primary flight display (PFD), multifunction display (MFD), or on other related cockpit displays.

*I. Desired Pilot-in-Training Scenario Outcomes.* The object of scenario-based training (SBT) is a change in the thought processes, habits, and behaviors of the pilot in training during the planning and execution of the scenario. Since the training is "student-centered," the success of the training is measured on a grading scale that provides more effective feedback to both the pilot in training and the instructor than the "outstanding, satisfactory, unsatisfactory" or "exceeds standards, meets standards, needs more training" scales that often meet the instructors' needs but not the students'. See paragraph 6C(3) for a complete description of the learner-centered grading scale.

*J. Emergency Escape Maneuver.* A maneuver (or series of maneuvers) performed manually or with the aid of the aircraft's automated systems that will allow a pilot to successfully escape from an unanticipated flight into Instrument Meteorological Conditions (IMC) or other life-threatening situation.

*K. Light Turbine Technically Advanced Aircraft (TAA).* A jet or turboprop TAA certified for single-pilot operations, weighing 12,500 lbs or less, may be equipped with cabin pressurization, and may be capable of operating in Class A airspace on normal mission profiles.

*L. Mission-Related Tasks.* Those tasks required for the safe and effective accomplishment of the mission.

*M. Multifunction Display (MFD).* A device that combines primarily navigation, systems, and situational awareness information onto a single electronic display.

*N. Primary Flight Display (PFD).* A device that combines the primary six flight instruments plus other related navigation and situational awareness information into a single electronic display.

*O. Proficiency-Based Qualification.* A qualification based on demonstrated performance rather than other flight time or experience.

*P. Simulation.* Any use of animation and/or actual representations of aircraft systems to simulate the flight environment. Pilot-in-training interaction with the simulation and task fidelity for the task to be performed is required for effective simulation.

*Q. Scenario-Based Training (SBT).* A training system that uses highly structured scripts of “real-world” experiences to address flight-training objectives in an operational environment. Such training can include initial training, transition training, upgrade training, recurrent training, and special training. The appropriate term should appear with the term “Scenario Based,” e.g., “Scenario Based Transition Training,” to reflect the specific application.

*R. Single Pilot Resource Management.* The “art and science” of managing all resources available to a single pilot to ensure the successful outcome of the flight.

*S. Technically Advanced Aircraft (TAA).* A general aviation (GA) aircraft that contains a global positioning system (GPS) navigator with a moving map display, plus any additional systems. Traditional systems such as autopilots are included when combined with GPS navigators. This includes aircraft used in both VFR and IFR operations, with systems certified to either VFR or IFR standards.

## 4. BACKGROUND.

A. The Safer Skies initiative and the FAA’s current Flight Plan represents a commitment by government and the aviation industry to significantly reduce the number of GA accidents. Compounding the challenge of this initiative is the emergence of a new class of TAA that offer significant improvements in performance and capability. These innovative aircraft are equipped with highly automated cockpits and attain cruising speeds that require flight management and decisionmaking skills normally expected from airline transport pilot (ATP)-level pilots; yet they may be flown by pilots with significantly less experience and training. It is imperative that a new training philosophy be implemented to reduce error and accelerate the acquisition of higher-level judgment and decisionmaking skills.

B. Various studies have identified pilot error as the cause of 70–80 percent of all aircraft accidents. Most fatal accidents have poor aeronautical decisionmaking, risk management, and loss of situational awareness as causal factors. To meet the Administrator’s Flight Plan goal to not exceed 319 fatal accidents per year by 2009, GA pilots need better aeronautical decisionmaking, risk management, and situational awareness skills.

C. There is a history of increased accidents when new technologies and capabilities are introduced in aircraft. Bonanzas, light twins, Learjets, and more recently, the Piper Malibu and Cirrus SR-20 and 22s, all illustrate this difficulty. Research into the causal factors of these aircraft’s accidents revealed a need to change and improve pilot training. GA aircraft have begun the next technological leap with “glass” cockpits. All major manufacturers (Adam Aircraft, Beechcraft, Cessna, Cirrus Design, Diamond Aircraft, Lancair Certified, Mooney Airplane, and New Piper) now have a full glass cockpit as standard or optional equipment.

D. In the past, displays, avionics, and navigation equipment all looked and functioned in a similar manner regardless of the manufacturer. This is not the case with today’s advanced avionics systems and displays. Training in the operation of one manufacturer’s GPS receiver may not give the pilot sufficient knowledge to safely operate another manufacturer’s receiver. This is even more evident with full glass cockpits. Not only does the functionality of PFDs and MFDs vary between manufacturers, but also due to aircraft systems

differences, the same avionics equipment in a different type aircraft may function differently.

*E.* Modernization, rapid evolution of the National Airspace System (NAS), and security issues require pilots to attain situational awareness. MFDs and GPSs have the ability to display special use airspace. Proper training in the use of these functions is critical.

*F.* GA is being used more as a transportation option than an enthusiast pastime. New TAA are designed to fly longer and faster than traditional aircraft. Many people purchasing these aircraft are not aviation enthusiasts; they are business people who see the airplane as a transportation tool. Thus, one-size-fits-all training may be too much for some GA pilots and not enough for others.

*G.* Because of the GA community's diversity and the rapid development of new aviation technologies and equipment, the FAA and industry recognize the need to develop and implement new training methods. While working to meet the needs of the GA community, it became clear that the FAA's regulatory process was too slow to keep pace with current technical innovations. As a result, the FAA needed to work collaboratively with industry to develop new time-effective, cost-effective, and innovative ways to train pilots. To meet this need the FAA established FITS.

## 5. THE FITS PROGRAM.

*A.* The FITS program is a joint government-stakeholder initiative designed to reduce the total number of GA accidents. Its mission is to improve pilot learning to safely, competently, and efficiently operate a technically advanced piston or light jet aircraft in the modern NAS. Its goals are to implement training that reduces pilot error and accelerates acquisition of higher-level judgment and decisionmaking skills. The FITS program focuses on small (12,500 pounds or less maximum gross takeoff weight) TAA, which are either reciprocating or jet-powered and which are owner or professionally flown for personal or business transportation. Commercial operators (air carriers and charter operators) have stringent training requirements. Operators of crew-served business jets already have a safety record rivaling air carriers. Sport and recreational pilots have their own training and certification standards that impose certain restrictions. The FITS focus is to reduce exposure to risk by improving each pilot's

decisionmaking skills. For example, a GA community's businessman using a TAA as a transportation tool can experience significant safety gains with FITS. Although FITS originally focused on TAAs, FITS tenets will apply to more than just TAAs.

*B.* The FITS technical team researched training and the aviation operations that have the best safety record (i.e., air carrier and military). This research indicated that development of better aeronautical decisionmaking, risk management, and situational awareness skills could be achieved through SBT. FITS programs use SBT to effectively integrate risk management, aeronautical decisionmaking, situational awareness, and single pilot resource management into every flight operation. Little in FITS training is new. FITS implements some of the aspects of air carrier and military training programs into the GA training arena.

*C.* The FITS technical team includes personnel from the General Aviation and Commercial Division, AFS-800, and members from two of the universities in the Center for General Aviation Research (CGAR). The CGAR is a part of the FAA Center of Excellence (COE). For information on the COE go to [www.coe.faa.gov](http://www.coe.faa.gov). For information on the CGAR go to [www.cgar.org](http://www.cgar.org).

*D.* Participation in FITS is not a regulatory requirement, but can be implemented within the current regulations. AFS-800 has developed incentives for operators to implement FITS into their training programs.

*E.* A FITS training program addresses the nature of training:

(1) Basic aeronautical skills ("physical" airplane).

- Required motor skills
- Fundamental maneuvers

(2) Operation of complex equipment ("mental" airplane).

- Advanced avionics
- Operation in NAS (ATC, airspace, etc.)

(3) Higher order safety skills.

- Single pilot resource management
- Aeronautical decisionmaking
- Risk management
- Situational awareness and hazard avoidance

**NOTE: There are four levels of FITS-accepted syllabuses. The objective of the training and what FITS criteria is met will determine the level of FITS acceptance. Paragraph 7 describes the FITS acceptance levels.**

F. FITS are FAA/GA industry-developed training programs acceptable to the FAA. There are currently three categories of FITS products:

(1) *Generic FITS Programs.* Generic FITS programs will be developed for a broad category of training functions for general GA usage such as the flight review, complex and high performance training, and other functions. Individual training entities (pilot schools, training centers, individual instructors, etc.) may adapt them for a particular aircraft or other desired training outcomes.

(2) *Specific FITS Programs.* Specific FITS programs have been, and will continue to be, developed as new aircraft and technologies are introduced to the marketplace. For example, Garmin has introduced a specific FITS program to train pilots on the use of its 430/530 family of avionics. Another specific FITS might be for one aircraft type. These training standards may be integrated with the generic standards described in paragraph 5F(1) above.

(3) *Mandatory FITS in Accordance with Title 14 of the Code of Federal Regulations (14 CFR) Part 61, Section 61.31(h).* In rare instances, the FAA may elect to invoke § 61.31(h) to require aircraft type specific training for aircraft with unusual operating characteristics, flight systems, or critical safety issues. Because of the regulatory implications of a mandatory FITS program, notice and/or public comment would normally be required through the Federal Register to implement this provision. Implementation could be through an amendment to the AFM, with reference to the FITS standard directory.

G. Except as described in paragraph 5F(3) above, FITS is completely voluntary. There is no requirement for any training entity to adopt the FITS training

philosophy. FAA is working with the GA industry to provide incentives for pilots and training operators to adopt and use FITS. The following are some possible incentives:

(1) Lower insurance costs (or in some cases, the availability of insurance) if the pilot is trained under an accepted FITS program. One major insurance carrier has already agreed to a 10 percent discount for pilots who complete FITS recurrent training that includes aeronautical decisionmaking and risk management. This same insurance provider has made FITS-accepted training mandatory for its clients who purchase new glass panel-equipped aircraft.

(2) Other insurance-related cost saving incentives may result from the use of a FITS program. All insurance carriers impose experience requirements for a particular make and model of aircraft to be insured. Typically, if the pilot has little or no experience in the make and model, the insurance carriers require a certain amount of ground and/or flight training from an insurance carrier approved flight instructor. The FITS team will work with insurance carriers to demonstrate how FITS can substantially reduce the number of required flight training hours by providing training that addresses the specific causal factors associated with many GA accidents. For example, FITS may be able to reduce 25 hours of required make and model training down to 5 hours, thus reducing the operator's overall instructional costs.

H. There are four basic types of pilot training: initial, recurrent, transition, and equipment specific. The FITS team has developed some generic syllabuses that a training provider can use to develop its specific FITS compliant curriculums. Generic FITS syllabuses are on the FITS Web site at [http://www.faa.gov/education\\_research/training/fits/](http://www.faa.gov/education_research/training/fits/) and clicking on the link for FITS Training & Curriculums. When additional syllabuses are developed, they also will be placed on the FITS Web site. Following the generic curriculums is not required. They are provided to the general public for use as a guideline.

I. Standard procedures for approval of a curriculum will be used when receiving and evaluating a request for FITS acceptance from a training entity. The Flight Standards District Office (FSDO) will be responsible for acceptance or denial of a request for FITS from pilot schools (both parts 61 and 141), individual flight instructors, and training

centers. All requests for FITS acceptance from original equipment manufacturers (OEM) or training developers (Jeppesen, Electronic Flight Solutions, Sporty's, etc.) will be referred to the FITS program manager at (202) 267-8212.

**6. FITS CRITERIA.** FITS training should always include the three concepts of SBT, single pilot resource management, and learner-centered grading.

*A. Use of SBT.* SBT should be deployed throughout the syllabus. (Examples are contained in the appropriate generic master syllabuses, such as the Transition, Instructor, Recurrent, Private/Instrument, etc., found on the FITS Web site). Scenarios should be adapted to the aircraft, its specific flight characteristics, stage of training, the likely flight environment, and should always require the pilot to make real-time decisions in a realistic setting. Most scenarios should be planned and led by the student (with the exception of the first few flights or until the student has developed the required psychomotor skills). The more primary the student the more coaching will be required by the instructor. As the student's decisionmaking process and risk management skills are developed, the direction given by the instructor will diminish during the instructional curriculum.

*B. Single Pilot Resource Management.* Every phase of every scenario should include single pilot resource management. It will be a graded item during preflight, pretakeoff, takeoff, climb, cruise, descent, approach, and landing. The primary emphasis will be on developing and enhancing the mental process and underlying thinking skills needed by the pilot to consistently determine the best course of action in response to a given set of circumstances. Single pilot resource management integrates all of the following concepts:

- Aeronautical decisionmaking and risk management
- Automation management
- Task management
- Situational awareness
- Controlled flight into terrain (CFIT) awareness

*C. Learner- (Student)-Centered Grading—Desired Pilot in Training Scenario Outcomes.*

**NOTE: The specific desired outcomes are included in the FITS master learning outcomes lists contained toward the end of all FITS generic syllabuses.**

(1) The objective of SBT is to change the thought processes, habits, and behaviors of the students during the planning and execution of the scenario. Since the training is learner-centered, the success of the training is measured in the following desired student outcomes.

(a) *Maneuver grades (tasks).*

1. *Explain.* At the completion of the scenario, the pilot in training will be able to describe the scenario activity and understand the underlying concepts, principles, and procedures that comprise the activity. Significant instructor effort will be required to successfully execute the maneuver.

2. *Practice.* At the completion of the scenario the student will be able to plan and execute the scenario. Coaching, instruction, and/or assistance from the certificated flight instructor (CFI) will correct deviations and errors identified by the CFI.

3. *Perform.* At the completion of the scenario, the pilot in training will be able to perform the activity without assistance from the CFI. Errors and deviations will be identified and corrected by the pilot in training expeditiously. At no time will the successful completion of the activity be in doubt. "Perform" will be used to signify that the pilot in training is satisfactorily demonstrating proficiency in traditional piloting and systems operation skills, i.e., the pilot in training meets the practical test standards (PTS).

4. *Not observed.* Any event not accomplished or required.

(b) *Single pilot resource management grades.*

1. *Explain.* The student can verbally identify, describe, and understand the risks inherent in the flight scenario. The student will need to be prompted to identify risks and make decisions.

2. *Practice.* The student is able to identify, understand, and apply single pilot resource management principles to the actual flight situation. Coaching, instruction, and/or assistance from the CFI

will quickly correct minor deviations and errors identified by the CFI. The student will be an active decisionmaker.

3. *Manage/decide.* The student can correctly gather the most important data available both within and outside the cockpit, identify possible courses of action, evaluate the risk inherent in each course of action, and make the appropriate decision. Instructor intervention is not required for the safe completion of the flight.

(2) Grading will be conducted independently by the student and the instructor, then compared during the postflight critique.

(3) Learner-centered grading (outcomes assessment) is a vital part of the FITS concept. Previous syllabuses and curriculums have depended on grading scales designed to maximize student management and ease of instructor use. Thus the traditional “excellent, good, fair, poor” or “exceeds standards, meets standards, needs more training” often meet the instructor’s needs but not the student’s. The learner-centered grading described above is a way for the instructor and student to determine the student’s level of knowledge and understanding. “Perform” is used to describe proficiency in a skill item such as an approach or landing. “Manage-Decide” is used to describe proficiency in the single pilot resource management area, such as aeronautical decisionmaking. Describe, explain, and practice are terms used to describe student learning levels below proficiency in both.

(4) Grading should be progressive. During each flight, the student should achieve a new level of learning (e.g., during flight one, the automation management area, might be a “describe” item, by flight three a “practice” item, and by flight five a “manage-decide” item).

**7. LEVELS OF FITS ACCEPTANCE.** The following are the levels of FITS acceptance:

A. *Accepted FITS Flight Syllabus.* This will incorporate all the tenets of FITS and include flight training in an aircraft and/or an aviation training device or flight training device. Examples of this type of flight syllabus include initial, transition, and recurrent training syllabuses.

B. *Accepted FITS Ground Syllabus (No Actual Inflight Training).* This will incorporate all the tenets

of FITS. Application of this level of acceptance is not intended to teach the pilot in training psychomotor pilot (“stick and rudder”) skills or full cockpit/aircraft integration in a certain aircraft. It is intended to enhance certain skill sets of the pilot in training such as teaching him or her how to use a new glass cockpit display or develop better single pilot resource management skills. This ground-based training can incorporate the use of an aviation training device, flight training device, or partial task trainer. A FITS-accepted ground syllabus will be interactive in real-time and led by an instructor.

C. *Accepted FITS Self-Learning Program.* This may be either an interactive computer software program or online (distance learning) course on a specific application or subject. The purpose of this training is for the pilot in training to learn about specific equipment or systems, or to enhance a specific higher order thinking skill. Scenario training and testing is required. Since it does not need to be interactive in real-time and led by an instructor, learner- (student) centered grading is not required.

(1) If the program is targeted for a piece of equipment (i.e., specific GPS unit), the equipment should act like the targeted equipment during the interaction with the equipment, to a point. (A CD-ROM program is not expected to emulate all possible errors in a scenario. But basic error inputs should result in the program reacting the same way the piece of equipment would act.) After basic familiarization training on the equipment, scenarios should be used to demonstrate the pilot in training’s proficiency and knowledge. The program should allow the pilot in training to make errors and demonstrate the consequences of those errors.

(2) For non-equipment programs (i.e., aeronautical decisionmaking development), scenarios with multistring testing should be used. Information on single-string and multistring can be found in the FITS Piston Technically Advanced Aircraft Recurrent Training Syllabus and Standards, located on the generic curriculums page of the FITS Web site [http://www.faa.gov/education\\_research/training/fits/](http://www.faa.gov/education_research/training/fits/).

**NOTE: Since an accepted FITS self-learning program would probably be marketed nationally, FITS self-learning programs are only accepted by the FITS program manager.**



*D. Accepted FITS Supporting Materials.* These products do not meet the training tenets of FITS (i.e., may not be scenario-based), but the subject matter of these supporting materials is integral to FITS. These products could be accepted on their own technical merit, but only as a part of an accepted FITS flight or ground syllabus or FITS self-learning program. For example, a CD-ROM on risk management could be accepted as supporting a FITS transition syllabus. Accepted FITS Supporting Materials do not need to be reviewed or evaluated by the FSDO inspector when submitted as part of an entire FITS syllabus. FITS supporting materials are normally developed by an OEM or type-certificate holder (i.e., Cessna, Cirrus, Eclipse, etc.), or a developer of training materials (i.e., Sporty's, Jeppesen, ASA, etc.), and are accepted by the FITS program manager.

**8. EVALUATING A CURRICULUM.** An inspector may receive a request for FITS acceptance for a variety of courses at certain levels of FITS. This may include pilot certification courses, transition courses, avionics courses, and recurrent/currency courses (part 61, §§ 61.56, 61.57(d), or 61.58). When reviewing and evaluating a curriculum that has been submitted for FITS acceptance, the following must be considered:

*A. SBT.* As explained in paragraph 5B, SBT helps students develop better aeronautical decisionmaking, risk management, and situational awareness skills than could be achieved through traditional maneuvers-based training. SBT is not only applicable in flight. It can be also used during partial task training and ground training. For example, if a flight school uses a desktop GPS unit for training, instead of simply demonstrating how each button performs, a scenario can be developed so that the student receives a clearance, inputs a flight plan, and actually conducts the flight. The instructor can act as ATC, giving route changes, emergencies (using nearest airport function), weather changes (students need to make decisions on whether to continue or divert), approach changes, missed approach, etc. The inspector must ensure that the scenario is:

(1) *Valid.* The scenario must teach what it is designed to teach.

(2) *Realistic.* Multiple failures of different systems all at the same time may not be realistic.

**NOTE: While it is important to introduce scenarios as early as possible**

**(to encourage the development of proper judgment and decisionmaking skills) this should not preclude flights devoted to specific skills such as landings and takeoffs that require practiced hand-eye coordination skills. New maneuvers should be introduced through the integrated use of simulation. For instance, a student should first learn what the functions are in a GPS desktop trainer before moving on to integrated scenarios.**

*B. Single Pilot Resource Management.* Single pilot resource management integrates the concepts of aeronautical decisionmaking and risk management, automation management, task management, situational awareness, and CFIT awareness. Traditional GA instruction often left out this training and the use of the autopilot. Today, with advanced technology and a changing NAS, flight under IFR without a functioning autopilot should be considered, for many aircraft and/or operations, an abnormal situation. When evaluating a curriculum, the course must include these concepts:

(1) *Aeronautical Decisionmaking and Risk Management.* This is enhanced when the pilot in training makes decisions. Initially, the instructor must guide the pilot in training through the aeronautical decisionmaking and risk management process. As the student's aeronautical decisionmaking and risk management skills develop, the instructor should allow the student to make more and more decisions. The instructor will ask questions on the decisions the pilot makes. For example, if the pilot in training is conducting a diversion, questions might be "Why did you pick that airport? What other airports would have also been adequate? Why didn't you pick one of the others?"

(2) *Automation Management.* The Instrument Practical Test Standard (FAA-S-8081-4) requires an applicant "to utilize an autopilot and/or flight management system (FMS), if properly installed, during the instrument practical test to assist in the management of the aircraft." Understanding when to use, or more importantly, when not to use certain levels of automation, should also be part of a FITS-accepted curriculums.

(3) *Task Management.* This concept teaches how to prioritize and select the most appropriate tasks

(or series of tasks) to ensure successful completion of the training scenario.

(4) *Situational Awareness*. This is defined by the FAA as the accurate perception and understanding of all the factors and conditions within the four fundamental risk elements (the pilot in command, the aircraft, the environment, and the operation) that affect safety before, during, and after flight (see Aviation Instructor's Handbook, FAA-H-8083-9, Figure 9-5). The Naval Aviation Schools Command defines situational awareness as the degree of accuracy by which one's perception of the current environment mirrors reality. Appropriate training on instruments and cockpit displays will enhance situational awareness. Depending on the equipment in the aircraft, situational awareness training may include not only where the aircraft is along the route of flight, but also where and how close terrain and obstacles are (terrain database), weather phenomena (data link), and other traffic (e.g., Automatic Dependent Surveillance-Broadcast (ADS-B), Flight Information Service-Broadcast (FIS-B), etc). Limitations of these displays must be emphasized. Fidelity of data link weather may restrict using it tactically; displays of other aircraft may depend on proximity to certain enroute radar sites and equipage of other aircraft. Research indicates that these displays may distract pilots from performing their "see and avoid" responsibilities.

(5) *CFIT Awareness*. This ties directly with situational awareness training.

**9. OEM FITS ACCEPTANCE.** Some OEMs have developed a national FITS acceptance system. The OEM has at least a FITS-accepted transition and instructor syllabus. These manufacturers require that instructors in their organizations who sell or rent aircraft (pilot schools, distribution centers, fixed-base operators, etc.) complete their FITS-accepted transition and instructor training. These instructors use the OEM FITS-accepted transition and recurrent syllabuses (tailored to the individual organization) to conduct FITS training. In this case, these organizations automatically fall under the OEM acceptance and do not require FITS acceptance from the FSDO.

**10. SEPARATION OF FITS ACCEPTANCE AND 14 CFR PART 141/142 APPROVAL.** There are many curriculums approved under parts 141 and 142 that do not meet FITS acceptance. FITS review and acceptance must be conducted on its own merit. A denial of FITS acceptance conveys no determination on any other approval the operator may already have obtained.



## SECTION 2. PROCEDURES

### 1. PREREQUISITES AND COORDINATION REQUIREMENTS.

A. Knowledge of the FITS program.

B. Knowledge of the regulations the applicant proposes to operate under (part 61, 141, or 142).

### 2. REFERENCES, FORMS, AND JOB AIDS.

A. *References.*

- Volume 2, Chapter 140, Introduction to Part 141 Related Tasks
- Volume 2, Chapter 141, Conduct Initial Certification or Renewal of a Part 141 Pilot School
- Volume 2, Chapter 142, Approve Training Course Outlines for a Part 141 Pilot School
- Flight Instructor Training Module, Volume I, FAA/Industry Training Standards
- Generic training syllabuses found at [http://www.faa.gov/education\\_research/training/fits/training/generic/](http://www.faa.gov/education_research/training/fits/training/generic/)
- FITS curriculum acceptance criteria at [http://www.faa.gov/education\\_research/training/fits/guidance/](http://www.faa.gov/education_research/training/fits/guidance/)

B. *Forms.*

- None

C. *Job Aids.*

- Sample figures

### 3. PROCEDURES.

A. *Receive Application.* Receive the applicant's request for FITS acceptance for a flight syllabus (initial, recurrent, transition, course of pilot training under part 61, 141, or 142.)

(1) If the applicant/course is an OEM, or is contracted by OEM to conduct transition training, refer the applicant to the FITS program manager, AFS-810, (202) 267-8212.

(2) If the applicant requests acceptance of a FITS self-learning program or FITS supporting material, refer the applicant to the FITS program manager.

(3) If the applicant/course is from a part 61 pilot school (which includes individual flight instructors), a part 141 pilot school, or a part 142 training center and requests acceptance of a FITS flight syllabus or a FITS ground syllabus, accept the application, conduct the evaluation, and accept or deny the syllabus, as appropriate.

(4) If the request for FITS acceptance is from a developer of nationally distributed training materials (e.g., ASA, Jeppesen, King), refer the applicant to the FITS program manager.

*B. Evaluate the Request.* For FITS acceptance of the curriculum the inspector must not only evaluate the curriculum, but must also ensure the materials contain enough information to provide for instructor familiarization.

(1) The course must meet the intent of FITS. While it is important to introduce scenarios as early as possible (to encourage the development of proper judgment and decisionmaking skills) this should not preclude flights devoted to specific skills such as landings and takeoffs that require practiced hand-eye coordination skills. New maneuvers should be introduced through the integrated use of simulation. The following tenets should be included in the course and integrated into almost every lesson:

- Aeronautical decisionmaking and risk management
- Automation management
- Task management
- Situational awareness
- CFIT awareness

**NOTE: The course must be designed so that the instructor can evaluate these tenets.**

(2) The instructors should have a good knowledge of how to conduct SBT. Additionally, the

scenarios in the syllabus should be descriptive enough to ensure SBT is conducted.

(3) If the applicant is a part 141 pilot school or a part 142 training center that requests FITS acceptance at the same time it requests course approval, it is possible that its course may be approved under those respective regulatory parts, yet not meet the FITS criteria. If this is the case, the inspector should inform the applicant why the curriculum does not meet the FITS criteria. It is then up to the applicant to decide if it wants to either:

(a) Make changes to the curriculum to receive FITS acceptance concurrently with the approval of the course;

(b) Have the syllabus approved under part 141 or 142, as applicable, and then make changes to the syllabus to meet FITS acceptance; or

(c) Cancel the request for FITS acceptance and have the syllabus approved under part 141 or 142, as applicable, and resend the request for FITS acceptance. In this case the applicant can request FITS acceptance at a later date with a request for a change in its curriculum.

(4) *FITS-Accepted Supporting Material.* If the operator is requesting FITS flight syllabus or FITS ground syllabus acceptance and the package contains FITS-accepted supporting material, that material may be accepted without further review as long as the following conditions are met:

- The material is appropriate to the curriculum
- The FITS-accepted supporting material has a current and valid letter of acceptance
- The operator has permission from the developer of the FITS-accepted supporting material to use the material in its program

**NOTE: FITS-accepted supporting material is evaluated and accepted by the FITS program manager.**

*C. Accept or Deny the FITS Request.*

(1) If, after evaluation, the syllabus meets the FITS criteria and the training provider is competent to

conduct FITS training, then a letter of FITS acceptance is issued to the training provider using template B501. This template is found in the associated Automated Operations Safety System (OPSS) database (parts 61, 141, and 142, as appropriate to the training organization). The process for issuing this letter with the OPSS is in FAA Order 8400.10, Air Transportation Operations Inspector's Handbook, volume 3, chapter 1, section 2.

(2) If, after evaluation, the syllabus does not meet the FITS criteria and/or the training provider is not competent to conduct FITS training, then a denial of request for FITS acceptance letter is issued to the training provider. This letter must include why the request has been denied (see Figure 36-1).

**4. ACCEPTING AMENDMENTS TO A FITS-ACCEPTED CURRICULUM.** Any changes to a FITS-accepted curriculum must be accepted by the inspector.

*A. Changes Requested by the Training Provider.* If the training provider changes a FITS-accepted curriculum, that change must be accepted prior to the implementation of that change. Minor changes may be handled informally via telephone conversation. A record of conversation must be kept in the operator's file.

*B. Changes in the FITS Acceptance Criteria.* The FAA will notify inspectors of any changes to FITS acceptance criteria. This notification will indicate if an immediate change is required of an operator's FITS-accepted syllabus.

**5. REMOVING ACCEPTANCE.** If the inspector has reason to believe that the operator is not training to the accepted FITS standard, then the inspector may remove FITS acceptance from that course. For example, due to instructor turnover, the new instructors may not have the appropriate knowledge of FITS training. Removal of FITS acceptance is accomplished by issuing a letter informing the holder that its FITS acceptance has been removed (see Figure 36-2).

**6. RENEWING FITS ACCEPTANCE.** A request for renewal of FITS acceptance should be received at least 45 days prior to the expiration.

*A.* The training provider must meet the same requirements for a renewal as for the original acceptance. Therefore, upon request for renewal of a

FITS-accepted course, the inspector should conduct the same evaluation as required for the original acceptance. However, if the inspector is thoroughly familiar with the training provider's operation or has recently inspected it, there may be no reason to do an extensive evaluation of the course or instructors.

*B.* When all the requirements are met, issue a new letter of acceptance, which is valid for 24 calendar-months.

*C.* If the requirements for FITS acceptance are not met, issue a denial of request for FITS acceptance letter is issued to the training provider. This letter must include why the renewal request has been denied.

**7. DURATION OF FITS ACCEPTANCE.** Unless otherwise surrendered or removed, FITS acceptance for any curriculum expires on the last day of the 24th calendar-month from the month the acceptance was issued.

## **8. FILING DOCUMENTS.**

*A.* If the training provider is a part 141 pilot school, a part 142 training center, or part 61 pilot

school with a file already established in the FSDO, place a copy of the letter of FITS acceptance or denial of request for FITS acceptance letter in the file.

*B.* If the training provider is a part 61 pilot school, establish a file for that training provider. If issuing a letter of FITS acceptance, place the letter and a copy of the syllabus in the file. If issuing a denial of request for FITS acceptance letter, that letter is placed in the file.

**9. TASK OUTCOMES.** Completion of the task results in issuing either:

*A.* A letter of FITS acceptance; or

*B.* A denial of FITS request.

## **10. FUTURE ACTIVITIES.**

*A.* Conduct surveillance or inspection at appropriate intervals.

*B.* Conduct a renewal of acceptance every 24 months.

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**FIGURE 36-1. SAMPLE LETTER OF DENIAL OF REQUEST FOR FITS ACCEPTANCE**

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FAA Letterhead

[Date]

[Applicant's name and address]

Dear [name]:

The FAA has evaluated [name of company and course]. Although it may be an excellent training program it currently does not meet the FITS tenets. The following is an explanation of what changes are required to receive FITS acceptance:

This letter conveys no determination on any FAA or other approval you may already have obtained. I encourage you to continue to pursue FITS acceptance. You can contact me for additional guidance.

Thank you for your efforts in raising general aviation safety.

Sincerely,

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**FIGURE 36-2. SAMPLE LETTER OF REMOVAL OF FITS ACCEPTANCE**

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FAA Letterhead

[Date]

[Applicant's name and address]

Dear [name]:

This letter is to inform you that FITS acceptance has been removed from [name of company and course] for the following reasons:

[List reasons]

Should you wish to discuss this matter, please contact this office at [telephone number].

Sincerely,